

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GEORGES MARCEL VICTOR THIELEN

Appeal No. 2005-2413
Application No. 09/912,865

ON BRIEF

Before KIMLIN, GARRIS and PAK, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 4-6, 8-14 and 17. Claim 1 is illustrative:

1. A runflat tire which is comprised of a generally toroidal-shaped carcass with an outer circumferential tread, two spaced beads, a radial structure having at least one ply extending from bead to bead and sidewalls extending radially from and connecting said tread to said beads; wherein said tread is adapted to be ground contacting, and said sidewalls contain at least one insert radially inward from said ply and wherein the insert is comprised of a rubbery polymer, from about 10 phr to about 130 phr of a filler, 1.5 to 6 phr of sulfur and 0.5 to 5 phr of 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane.

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The examiner relies upon the following references as evidence of obviousness:

Saneto et al. (Saneto)	5,158,627	Oct. 27, 1992
Freeman et al. (Freeman)	5,494,091	Feb. 27, 1996
Oare et al. (Oare)	5,871,600	Feb. 16, 1999

Vulcuren® Trial Product KA 9188 (Vulcuren), Rubber Business Group, Rubber Chemicals Product Information (Bayer Technical Information, Dec. 17, 1998)

Appellant's claimed invention is directed to a runflat tire having an insert comprising a rubbery polymer, sulfur and 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane (additive).

Appealed claims 1, 4-6 and 8-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Oare in view of Vulcuren and Freeman. Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the stated combination of references further in view of Saneto.

Appellant does not separately argue or group any of the claims on appeal, nor does appellant advance a separate argument for the examiner's rejection of claim 17. Accordingly, all the appealed claims stand or fall together with claim 1, and we will limit our consideration accordingly.

We have thoroughly reviewed each of appellant's arguments for patentability. However, we are in complete agreement with

the examiner's reasoned analysis and application of the prior art, as well as his cogent disposition of the arguments raised by appellant. Accordingly, we will adopt the examiner's reasoning as our own in sustaining the rejections of record, and we add the following for emphasis only.

As explained by the examiner, Oare discloses a runflat tire much like appellant's with the exception of not including the claimed additive in the rubbery insert. However, the examiner correctly points out that Vulcuren teaches that "highly reversion-stable vulcanizates are formed by including the claimed additive and further that improved retention of properties, such as modulus, hardness, and heat build up (hysteresis), are realized" (page 4 of Answer). Since appellant does not dispute the examiner's finding that these properties are significant for inserts of runflat tires, we find no error in the examiner's legal conclusion that it would have been obvious for one of ordinary skill in the art to incorporate the additive of Vulcuren in the rubbery insert of Oare for the purpose of retaining the advantageous properties of modulus, hardness and hysteresis.

Appellant contends that one of ordinary skill in the art, upon reading Vulcuren, would not understand that rubber containing the claimed additive "would show improved properties;

rather, one skilled in the art would understand that the rubber would show better retention of properties, i.e., reversion resistance" (page 6 of Brief, penultimate paragraph). However, it is not necessary for a finding of obviousness that Vulcuren teaches an improvement in properties. It is sufficient that one of ordinary skill in the art would have expected the benefit of the reversion resistance taught by Vulcuren. We note that appellant has not proffered any objective evidence of nonobviousness, including evidence of unexpected improvement in properties resulting from the claimed rubbery insert containing the additive.

Appellant also maintains that Vulcuren teaches that the additive "should be used with little or no sulfur, i.e., from about 0 to about 0.5 phr" (page 7 of Brief, first paragraph). Based on examples given by Vulcuren, appellant concludes that one of ordinary skill in the art would have been led away from using any amount of the additive in the composition of Oare which requires that 0.5 to 8 phr of sulfur be used, preferably 3 to 5 phr. The examiner, however, has established the fallacy of this argument. As emphasized by the examiner, Vulcuren expressly teaches that "[t]o maintain comparable crosslinking density, the usual amount of sulphur should be slightly reduced" (page 2, last

sentence). Also, Vulcuren's disclosure that the dosage for the additive should be increased to 7.0 phr when no sulfur is used is hardly a teaching that the additive "should be used with little or no sulfur," as argued by appellant (page 7 of Brief, first paragraph). In the words of the examiner, "[t]here is a significant difference in saying that little or no sulfur should be used and saying that the usual amount of sulfur should be reduced" (page 11 of Answer, second paragraph). We concur with the following analysis given by the examiner:

Thus, in modifying a given composition, one of ordinary skill in the art at the time of the invention would determine the "usual amount" of sulfur (for that composition) and modify said amount accordingly. In the case of Oare, the "usual amount" of sulfur is between 0.5 and 8.0 phr. It is evident that a slight reduction in the extreme values of Oare results in a range that is substantially equal to that of the claimed invention and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to include the claimed additive in an amount between 0.5 and 5 phr and sulfur in an amount between 1.5 and 6 phr.

As to Figure A submitted by applicant, the embodiments of Vulcuren are exemplary. In particular, Vulcuren only teaches two embodiments: 0 phr of sulfur and 7 phr of additive and 0.5 phr of sulfur and 2.5 phr of the additive. A fair reading of Vulcuren would not eliminate the use of sulfur concentrations greater than 1 phr as results from the inverse relationship depicted in Figure A. It is emphasized that the teachings of Vulcuren describe a slight reduction in the "usual amount" of sulfur- this is highly dependent on the "usual amount" of sulfur for a given composition (varies from compositions).

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Appellant has not refuted the examiner's analysis.

In conclusion, based on the foregoing and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)).

AFFIRMED

Edward C. Kimlin

EDWARD C. KIMLIN)
Administrative Patent Judge)
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Bradley R. Garris

BRADLEY R. GARRIS)
Administrative Patent Judge)
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